



## Quantapoint Case Study

# Quantapoint Supports Murphy & Dittenhafer in Award Winning Restoration of Historic Hotel

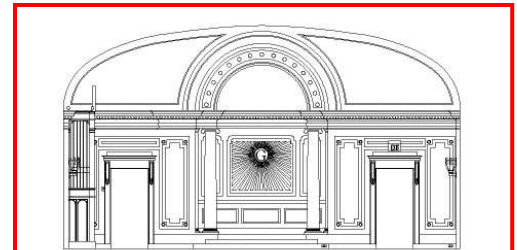
## *The Tremont Grand, Baltimore Maryland*

### **Situation**

Murphy & Dittenhafer identified the Maryland Masonic Temple, a 140 year old historic structure slated for demolition, as an excellent candidate for conversion into an event and conference facility. The scope of work involved the restoration and cleaning of the exterior structure and renovation of all interior finishes. This required accurate documentation of scagliola columns, ornamental plaster, murals, marble staircase and bronze elements of the 38,000 square foot structure.

### **Challenge**

Murphy & Dittenhafer's study determined the building to be architecturally significant as a surviving example of work by 19<sup>th</sup> and 20<sup>th</sup> century Baltimore architects and the architectural integrity of the structure had to be preserved. Unfortunately, no existing conditions documentation was available and re-creating it manually would have been a time-consuming and costly manual process.



### **Solution**

To develop accurate drawings of the entire interior façade, Murphy & Dittenhafer called upon Quantapoint Inc. of Pittsburgh, PA, the leading provider of as-built documentation using integrated laser scanning. Quantapoint's as-built laser documentation™ is a "turnkey" solution that combines hardware, software, data processing and delivery. Quantapoint rapidly collects, registers and verifies billions of highly accurate measurements to provide a consistent and up-to-date "digitized building" of as-built laser documentation – without invasive manual measurement, purchasing costly hardware or time-consuming remodeling.



## **Results**

In less than three weeks, Quantapoint gathered thousands of laser scans, which documented the historical structure and maintained its architectural integrity. Quantapoint delivered accurate, detailed drawings within 28 days of scanning. The data provided a dimensionally accurate representation of the building that was used to create various 2D drawings, such as Floor Plans, Exterior and Interior Elevations, Reflected Ceiling Plans, Roof Plans, Building Sections and more. The result was reduced costs, optimized schedules, increased quality and improved safety.

According to Michael Murphy, a Principal at Murphy & Dittenhafer, “Quantapoint’s scans were especially valuable because of the many areas of the building with elaborate ornamentation that we wanted to preserve while making additions. For example, the reflected ceiling plans assisted our team in identifying appropriate spaces to locate new life safety and other devices within the detailed period ceiling treatments.”

Mr. Allanbrook added: “Quantapoint brought many benefits to the project. Without their services we would have had to manually recreate the as-built documentation. It would have required a lot more field effort on our part to document the existing conditions to do the drawings ourselves. Finally, we probably would have reduced our expectations in terms of accuracy.”

In June, the Tremont Grand was recognized by Baltimore Heritage, Inc. “I anticipate that this award will be the first of many for the Tremont Grand,” said Mr. Murphy. “This is a restoration project that clearly demonstrates the value of adaptively reusing historic buildings and Quantapoint played a key role in supporting the restoration.”

In short, Murphy & Dittenhafer and Quantapoint are proud of the remarkable restoration and renovations of this historic gem that was once slated for demolition in favor of a parking garage.